Erratum: Effective Lorentz Force due to Small-Angle Impurity Scattering: Magnetotransport in High- T_c Superconductors [Phys. Rev. Lett. 86, 4652 (2001)]

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Although the equations in this Letter (cond-mat/0011020) are correct, V. Yakovenko [1] has pointed out to us that our evaluation, in the first paragraph of page 4655, of the new contribution to the Hall angle is incorrect. This estimate was based on the assumptions that the angle-dependent impurity scattering rate $1/\tau_u$ had a non-zero derivative at the zone edge and that all other angular dependence in Eqs. (21-23) can be neglected for simplicity. Actually, as pointed out by Yakovenko, $1/\tau_u$ must have zero derivative at the zone edge, and then our estimate of the new contribution to the Hall angle vanishes.

The effect we derived is non-zero in a the general case where other angular dependences are kept explicitly, such as the angular anisotropies of the density of states and of the small-angle cutoff parameter θ_c . In fact, these are the microscopic basis for the anisotropy of $1/\tau_u$; they give a contribution of the same order as that of $1/\tau_u$ and must be kept in a consistent calculation. These issues and a revised estimate will be addressed elsewhere.

Fig. 1 concerns Ni-doped YBCO. The text and caption are in error in referring to Zn doping. We thank V. Yakovenko for his interest and helpful correspondence.

[1] V. Yakovenko, private communication.